

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for manufacturing a ferroelectric device, comprising steps of:

providing ~~a~~ an insulating substrate;

forming a multi layer body ~~by~~ depositing successively a contact film, a lower electrode, a ferroelectric film and an upper electrode on said ~~insulating~~ substrate; and

processing etching said multi layer body,

wherein said processing etching step including comprises:

~~a first etching step for etching said upper electrode and said ferroelectric film;~~

~~heat treating a heat treatment step for heat treatment~~ said ferroelectric film in an oxidizing atmosphere under a condition of covering said contact film with said lower electrode;

and

~~a second etching step for etching said lower electrode and said contact film to expose said insulating substrate.~~

2. (Currently Amended) The method for manufacturing a ferroelectric device according to claim 1,

wherein said substrate comprises insulating film is formed on a semiconductor substrate having a transistor ~~and an insulating film disposed on said semiconductor substrate~~, and

wherein a contact plug is formed so as to pass through said insulating film ~~and so as to~~ electrically connect ~~connects~~ said transistor to said contact film.

3. (Currently Amended) The method for manufacturing a ferroelectric device according

, to claim 1, wherein at least a part of said lower electrode is etched in said first etching step of said upper electrode and said ferroelectric film.

4. (Currently Amended) The method for manufacturing a ferroelectric device according to claim 1, further comprising: wherein said second etching step includes
forming a first cover film so as to cover said upper electrode, said ferroelectric film and said lower electrode,

wherein said forming of the first cover film is performed before said etching of said lower electrode and said contact film, and

wherein said etching of said lower electrode and said contact film includes etching said first cover film together with said multi layer body.

5. (Currently Amended) The method for manufacturing a ferroelectric device according to claim 4, wherein said first cover film, said lower electrode and said contact film are etched, in a self-alignment manner, in said second etching step of said lower electrode and said contact film.

6. (Currently Amended) The method for manufacturing a ferroelectric device according to claim 5, further comprising: wherein said second etching step includes a step for
forming a hard mask on said upper electrode as an etching stopper before said etching of said lower electrode and said contact film performing the etching.

7. (Currently Amended) The method for manufacturing a ferroelectric device according

, to claim 4, further comprising: wherein said second etching step includes
forming a resist pattern on said first cover film before said etching of said lower electrode
and said contact film performing the etching.

8. (Currently Amended) The method for manufacturing a ferroelectric device according to claim 1, further comprising: a step for

forming a second cover film so as to cover said multi layer body after said second etching
of said lower electrode and said contact film step.

9. (Currently Amended) The method for manufacturing a ferroelectric device according to claim 8, further comprising: an additional
heat treating treatment step for heat treatment said ferroelectric film after said second
cover film forming of the second cover film step.

10. (Original) The method for manufacturing a ferroelectric device according to claim 1, wherein said contact film includes a binding film.

11. (Original) The method for manufacturing a ferroelectric device according to claim 10, wherein said contact film further includes an oxidation barrier film.

12. (Currently Amended) The method for manufacturing a ferroelectric device according to claim 1, wherein heat treating heat treatment is performed to recover a crystalline structure in the ferroelectric film.

13. (Currently Amended) The method for manufacturing a ferroelectric device according to claim 9, wherein said heat treating of said ferroelectric film after said forming of the second cover film ~~additional heat treatment~~ is performed to recover a crystalline structure of the ferroelectric film.

14-20. (Canceled)